

CLAIMS

What is claimed is:

- 1 1. An electrophoretic display comprising:
2 at least one capsule containing a suspending fluid and at least a first particle and a
3 second particle, said first particle having a first optical property and a first electrophoretic
4 mobility and said second particle having a second optical property and a second
5 electrophoretic mobility; and
6 at least two electrodes disposed adjacent said capsule;
7 wherein application of an electric field to said capsule by said electrodes causes
8 said capsule to change visual state responsive to the optical properties and electrophoretic
9 mobilities of said particles.
- 1 2. The electrophoretic display of claim 1 wherein said first electrophoretic mobility
2 and said second electrophoretic mobility are substantially non-overlapping.
- 1 3. The electrophoretic display of claim 1 wherein said capsule contains at least one
2 red particle, at least one blue particle, and at least one green particle.
- 1 4. The electrophoretic display of claim 1 wherein said suspending fluid is
2 substantially transparent.
- 1 5. The electrophoretic display of claim 1 wherein said suspending fluid is dyed.
- 1 ~~6. An electrophoretic display comprising:
2 at least one capsule containing a suspending fluid and at least one particle;
3 at least two electrodes disposed adjacent the capsule,
4 wherein application of a voltage potential to one of said at least two
5 electrodes causes said at least one particle to migrate within said capsule, causing said
6 capsule to change its visual state.~~

0010302304100

Sub
as
concl

1 7. The electrophoretic display of claim 6 wherein said suspending fluid is
2 substantially transparent.

1 8. The electrophoretic display of claim 6 wherein said at least one particle has an
2 optical property matching an optical property of one of said at least two electrodes.

1 9. The electrophoretic display of claim 6 wherein said at least one particle is
2 substantially white.

b 1 10. An electrophoretic display comprising:
2 at least one capsule containing a suspending fluid and at least one ^{white} particle;
3 a cyan-colored electrode disposed adjacent said capsule;
4 a magenta-colored electrode disposed adjacent said capsule, said magenta-colored
5 electrode spaced apart from said cyan-colored electrode;
6 a yellow-colored electrode disposed adjacent said capsule, said yellow-colored
7 electrode spaced apart from said cyan-colored electrode and said magenta-colored
8 electrode; and
9 a white electrode adjacent said capsule, said white electrode spaced apart from
10 said cyan-colored electrode, said yellow-colored electrode, and said magenta-colored
11 electrode;
12 wherein application of a voltage potential to said cyan-colored electrode,
13 magenta-colored electrode, and yellow-colored electrode causes said white particles to
14 migrate within the capsule to locations adjacent said cyan-colored electrode, said
15 magenta-colored electrode, and said yellow-colored electrode causing said capsule to
16 appear white, and wherein application of a second voltage potential to said cyan-colored,
17 said magenta-colored, and said yellow-colored electrode causes said white particles to
18 migrate within said capsule to a location adjacent said white electrode causing said
19 capsule to appear substantially black.

00440362 23804760